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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/780,618 | 02/12/2001 | Martin Sommer | SGW-109 | 9111 |
| 23599 | 7590 | 03/08/2004 | | |
| MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201 | | | | |
| | | | EXAMINER CHEVALIER, ALICIA ANN | |
| | | | ART UNIT 1772 | PAPER NUMBER |

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/780,618 | SOMMER ET AL. | |
| | Examiner | Art Unit | |
| | Alicia Chevalier | 1772 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-29 is/are pending in the application.
- 4a) Of the above claim(s) 7,12,23,24 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-11,13-22,25-27 and 29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

Request for Continued Examination

1. The Request for Continued Examination (RCE) under 37 CFR 1.53 (d) filed on November 26, 2003 is acceptable and a RCE has been established. An action on the RCE follows.
2. Claims 1-7 and 9-29 are pending in the application, claims 7, 12, 23, 24 and 28 are withdrawn from consideration due to restriction by original presentation, in paper #9 mailed February 26, 2003.
3. Amendments to claims, filed on November 26, 2003, have been entered in the above-identified application.

WITHDRAWN REJECTIONS

4. The 35 U.S.C. §102/103 rejection of claims 15-22 and 25-27 over Hall (US Patent No. 4,135,789), made of record in paper #9, pages 4-5, paragraph #13 has been withdrawn due to Applicant's amendment filed November 26, 2003.
5. The 35 U.S.C. §102/103 rejection of claims 1-3, 5, 9, 10, 13-15, 21, 22, 26 and 27 over Ahn et al. (US Patent No. 3,852,877), made of record in paper #9, pages 5-6, paragraph #14 has been withdrawn due to Applicant's amendment filed November 26, 2003.
6. The 35 U.S.C. §102/103 rejection of claims 1-3, 5, 13-15, 21, 22, 26 and 27 over Wainer (US Patent No. 4,073,989), made of record in paper #9, pages 6-7, paragraph #15 has been withdrawn due to Applicant's amendment filed November 26, 2003.

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7. The 35 U.S.C. §102/103 rejection of claims 1-2, 4-11, 13-15, 17-22 and 25-27 over Myers (US Patent No. 4,152,712), made of record in paper #9, pages 7-8, paragraph #16 has been withdrawn due to Applicant's amendment filed November 26, 2003.

8. The 35 U.S.C. §102/103 rejection of claims 1-3, 5-10, 13-15, 21, 26 and 27 over Tukude (US Patent No. 4,702,566), made of record in paper #9, pages 9-10, paragraph #17 has been withdrawn due to Applicant's amendment filed November 26, 2003.

NEW REJECTIONS

9. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Examiner's Summary of the Invention

10. To the best of the examiner's knowledge, the elected base, or independent, claims of the application, are interpreted as follows:

1. A molded element comprising:

- brittle-fracture material
- at least one opening
 - hermetically sealed with a sealing element
- wherein the molded element and the sealing element are permanently bonded together by a pressure weld.

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15. A molded element comprising:

- brittle-fracture material
- at least one opening to a cavity
 - hermetically sealed with a sealing element
- wherein the molded element and the sealing element are permanently bonded together by a cold pressure weld.

29. A molded element comprising:

- brittle-fracture material
- at least one opening
 - hermetically sealed with a sealing element
- wherein the molded element and the sealing element are permanently bonded together by a diffusion weld.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the instant case new claim 29 contain(s) the limitation “diffusion weld.” The specification does

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not disclose that the use of a diffusion weld to permanently bond the molded element and the sealing element together, therefore this limitation is considered new matter.

The examiner could only find support for pressure weld, welding by solid elements, welding by liquids, welding by gas, welding by electrical gas discharge, welding by movement, welding by electric current, welding by movement breaks, ultrasound welds, cold pressure weld, abrasive welds, and shock welds, see specification page 6, line 25 through page 7, line 13.

The new matter should be deleted.

Claim Rejections - 35 USC § 102

13. Claims 1-6, 9-11, 13-22, 25-27 and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hall (U.S. Patent No. 4,135,789).

Regarding Application's claims 1, 15 and 29, Hall discloses a seal for a liquid crystal display (*title*) comprising a glass plate (*col. 2, lines 45-46*), Applicant's claimed "molded element" made of "brittle-fracture material," with a one or several fill ports (*col. 3, line 1*), Applicant's claimed "at least one opening" and "at least one opening to a cavity," a glass bead (*col. 3, line 18*), Applicant's claimed "sealing element," is then sealed permanently, Applicant's claimed "molded element and sealing element permanently bonded together," and hermetically, Applicant's claimed "opening ... hermetically sealed by a sealing element," to form an integral part of the glass wall through which it extends (*col. 3, lines 6-9*).

The limitations "pressure weld," "cold pressure weld," and diffusion weld" are method limitations and do not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of

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patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art.

MPEP 2113.

Regarding Applicant's claim 2, Hall discloses glass plate (*col. 2, lines 45-46*), Applicant's claimed "molded element" is made of glass.

Regarding Applicant's claims 3-5, 10, 11, 14, 17, 18 and 25, Hall discloses that the a glass bead, Applicant's claimed "sealing element," comprise a glass, Applicant's claimed "brittle-fracture material," and is coated with a conductive metal disc (*col. 3, lines 26-28*).

Figure 3 shows that the glass bead has a cylindrical shape.

Regarding Applicant's claim 6, Hall discloses a glass plate (*col. 2, lines 45-46*), Applicant's claimed "molded element" and figure 3 shows that the at least one opening has the shape of a through-going cylindrical opening.

Regarding Applicant's claims 9, 13, 26 and 27, the limitation "bonded by welding by movement" or "bonded by ultrasound weld, high-frequency weld, rotary weld, friction weld, torsional, or orbital weld, cold pressure weld or abrasive weld" is a method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113.

Regarding Applicant's claim 16, Hall discloses that the cavity (*col. 3, line 4*), is filled with liquid crystal material (*col. 3, line 14*) or electrochromic filling (*col. 4, lines 66*).

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Regarding Applicant's claims 19 and 20, since Hall discloses that the glass plate (*col. 2, lines 45-46*), Applicant's claimed "molded element," and glass bead (*col. 3, line 18*), Applicant's claimed "sealing element," and made of the same material, i.e. glass, it is expected that they will have the same coefficients of thermal expansion.

Regarding Applicant's claims 21 and 22, Hall discloses the glass plate (*col. 2, lines 45-46*), Applicant's claimed "molded element," has one or several fill ports (*col. 3, line 1*), Applicant's claimed "one opening" and "two opening."

ANSWERS TO APPLICANT'S ARGUMENTS

14. Applicant's arguments in the response filed November 26, 2003 regarding pressure welding of record have been carefully considered but are deemed unpersuasive.

Applicant argues that a pressure weld leads to structural difference in the bond and stated that proof could be found in the "*Principles of Welding ...*" text provided to the office.

However, the text did not accompany Applicant's response.

Also, Applicant has not provided an affidavit showing that the prior art of record does not possess the same characteristics, i.e. that the feature is not a latent property of the Hall technology.

Applicant also adds that page 9 of the specification discloses that a diffusion weld process can also be use, however the specification does not have a page 9.

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Conclusion


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac

3/3/04


SANDRA M. NOLAN
PRIMARY EXAMINER